

REMARKS

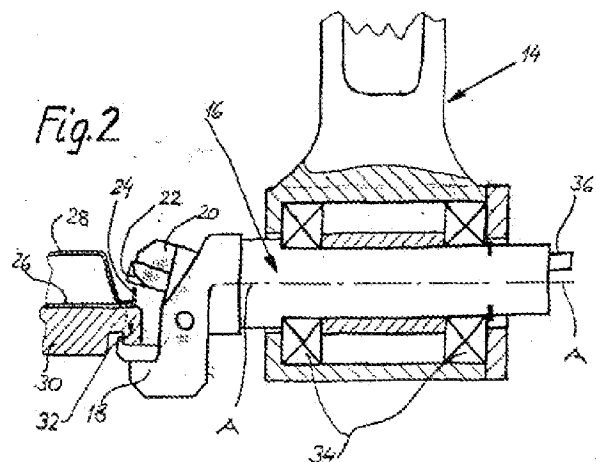
Claims 5-9, 13, 18-22, 26, 35-38 and 40-51 remain pending in this application. Claims 1-4, 10-12, 14-17, 23-25, 27-34 and 39 have been cancelled previously. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein.

PRIOR ART REJECTIONS

Claims 6, 7, 13, 36, 40 and 41 are rejected under 35 U.S.C. §102(b) as being anticipated by Esterl (DE 100 16 391). Claims 19, 20, 26, 38, 46 and 47 are rejected under 35 U.S.C. §103(a) as being unpatentable over Esterl in combination with Persson (US Patent No. 6,694,793). These rejections are respectfully traversed.

Regarding Claim 40, the Examiner states that Esterl discloses “a nest 30 for holding a first sheet metal 26, a robotic arm 2 operatively associated with the nest, a forming steel assembly including a tool steel 20 fixedly attached to an end of the robotic arm, the [tool] steel having a wedge-shaped face 22 conforming to a short flange 24 for crash forming the short flange on the first sheet material.” See Office Action, p. 2.

Esterl (see FIG 2, right) discloses a type of crease pliers 16 (also known as “nibblers” in the industry) which hem the panel 26 by progressively break forming the flange 24. In operation, the lower jaw 18 of crease pliers 16 is positioned by the guide strip 32 on the flange bed 30. The upper



jaw 20 is pivoted down toward flange bed 30 so that flange 24 is locally formed onto panel 28. The robot 2 progressively positions the crease pliers 16 along the panel to form a complete hem.

Applicant submits that Esterl does not anticipate the claimed subject matter for several reasons. The crease pliers 16 do not include “a tool steel fixedly attached at an end of the robotic arm” as recited in Claims 40 and 46. Rather, as noted above, the jaw 20 and tool steel 22 (i.e., the part engaging and forming the flange) pivot relative to the robotic arm so that it can pinch the flange onto the flange bed. While the jaw 20 does have a curved steel 22 which might be interpreted as “wedge-shaped face”, it clearly does not “conform to the short flange” as recited in Claims 40 and 46. Similar, the curved steel 22 cannot be said to have “a tapered, wedge-shaped face” as recited in Claims 36 and 38. Lastly, as noted above, the crease pliers are not “for crash forming the short flange” as recited in Claims 40 and 46. Instead, the crease pliers are used to nibble or break form a flange having a standard length (i.e., a standard flange as compared to a “short flange”) along an extended length of the body panel. Accordingly, Applicant submits that the claimed subject matter is patentably over the teachings of Esterl.

Persson does not remedy the deficiencies of Esterl with respect to Claims 6, 7, 13, 36, 40 and 41. In particular, Persson, like Sawa (US Pat. No. 5,228,190 previously cited by the Examiner) describes a roller hemming apparatus to form the standard flange along an extended length of the body panel, and cannot be successfully used to crash form a short flange. The roller 4 described in Persson is not “fixedly attached to an end of the robotic arm”, does not have “a wedge-shaped face conforming to a short

flange” and cannot be used for “crash forming the short flange on the first sheet material.” It is therefore improper to conclude that Esterl alone or in combination with Persson render the subject matter of Claims 40 or 66 obvious. See, Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*, 70 Fed. Reg. 57526, 57528-29 (Oct. 10, 2007) citing *In re Kahn*, 41 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).

For the foregoing reasons, Applicant submits that the prior art of record does not teach or suggest the subject matter recited in the pending claims. Accordingly, Applicant respectfully request that the Examiner reconsider and withdraw the rejections based on Sections 102 and 103 and pass this application to allowance.

ALLOWABLE SUBJECT MATTER

Applicant acknowledges the Examiner’s indication that the subject matter of Claims 5, 8, 9, 18, 21, 22, 35, 37, 42-45 and 48-51 would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims. In view of the remarks set forth above, Applicant submits that Claims 5, 8, 9, 18, 21, 22, 35, 37, and 42-45 which depend directly or indirectly from Claims 40 or 46 are patentable over the art of record, and are in condition for allowance without being re-written in independent form.

Applicant has re-written Claim 48 in independent form and presented it as new Claim 52. In view of the Examiner’s prior indication of allowance, Applicant submits that Claims 48-51 are also now in condition for allowance.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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